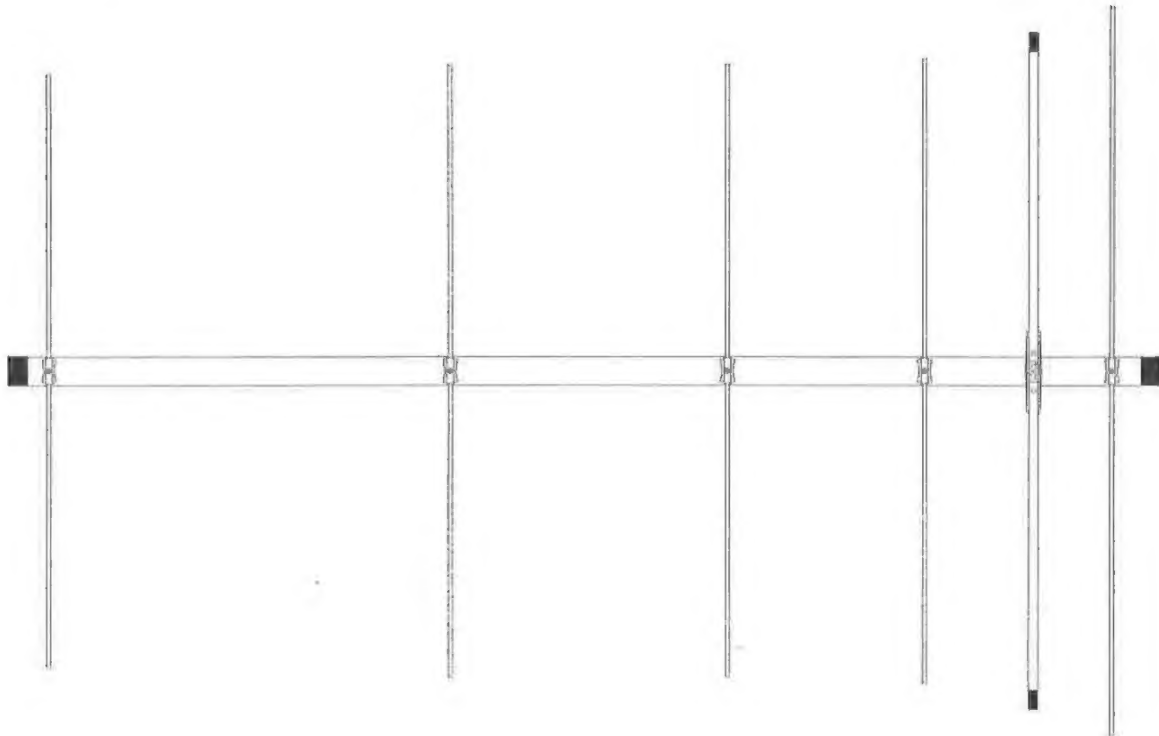


# MFJ-1852

2-METER OPTIMIZED  
WIDE BAND YAGI

## INSTRUCTION MANUAL



CAUTION: Read All Instructions Before Operating Equipment

# MFJ

300 Industrial Park Road  
Starkville, MS 39759 USA  
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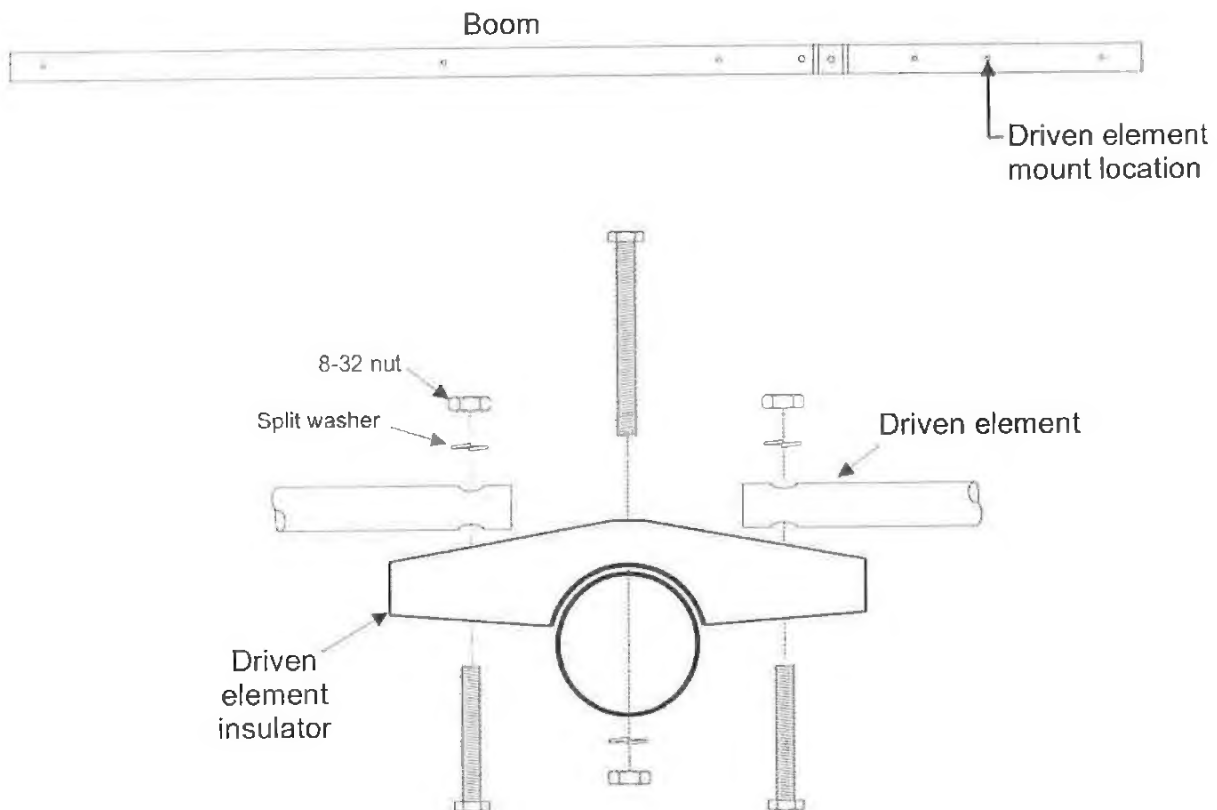
## **GENERAL DESCRIPTION**

The MFJ-XXXX is a compact 6-element 2 meter Yagi using the OWA (optimized wide band antenna) concept. This concept allows for a wide frequency range with a low swr. The antenna is lightweight and simple to assemble. A 50 ohm feed point means no adjustable parts are needed for matching.

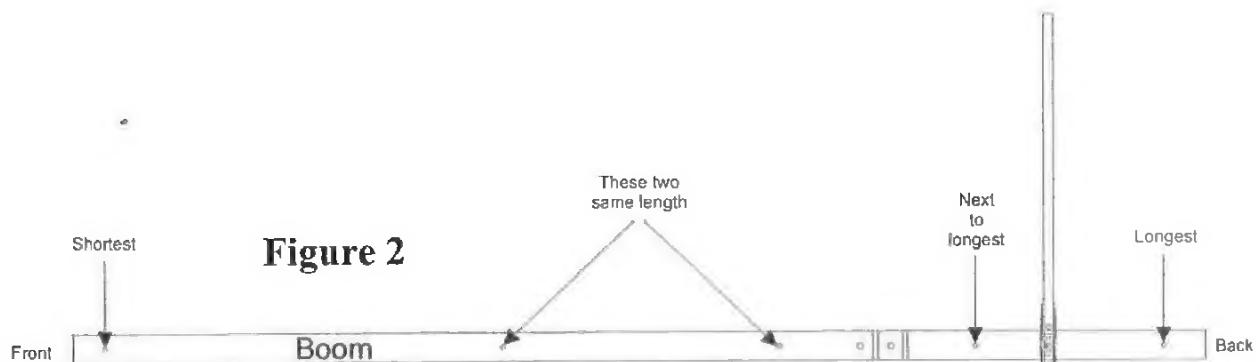
## **ASSEMBLY**

Find a location clear of obstructions that will allow you to assemble the antenna without bumping into anything or anybody. The antenna has lots of thin pointy ends that can poke someone or become bent if the antenna is moved about carelessly. Although this antenna is not considered "large", the elements make it difficult to maneuver in tight places. A concrete driveway or empty garage are both good places to assemble the antenna. Avoid assembly above grass as you will drop something and never see it again. All nuts and bolts should be tightened securely but not enough to deform the tube to which it is attached. Overtightening may cause the elements or boom to flex.

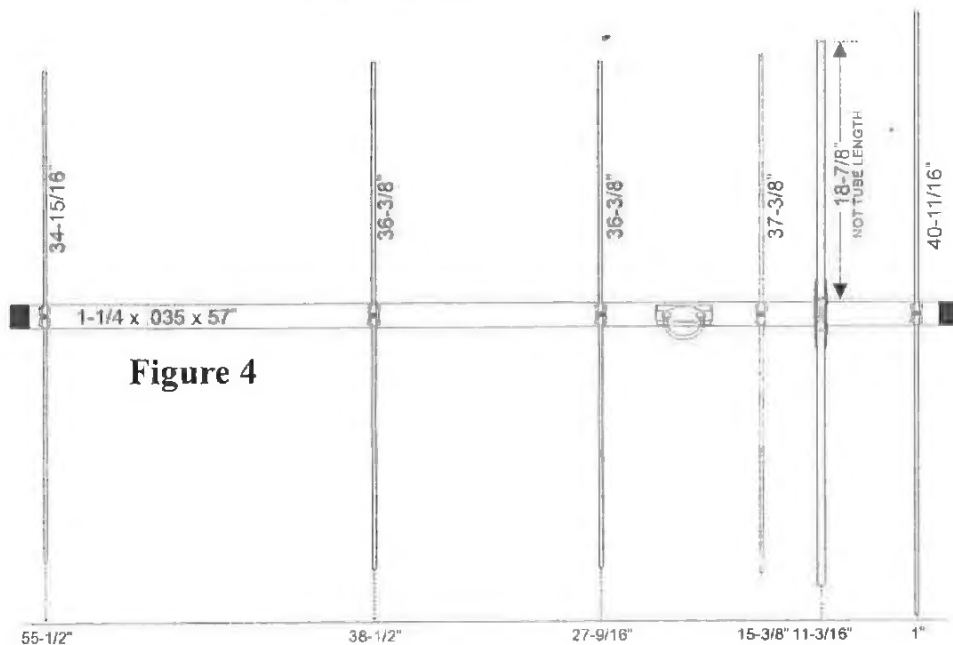
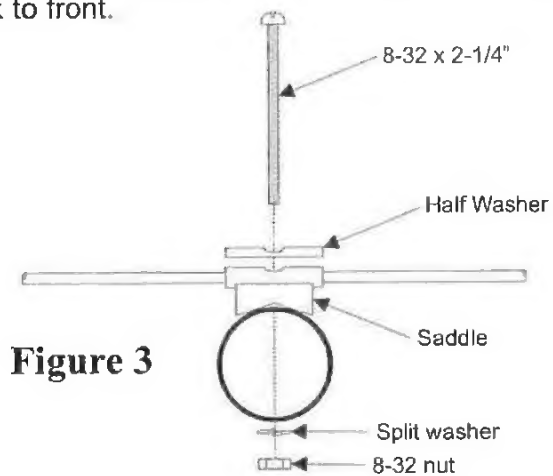
Attach the driven element insulator to the boom using the 8-32 x 2-1/4" bolt as shown. Secure with the split washer and nut. Install the driven elements using the 8-32 x 1" bolts as shown.



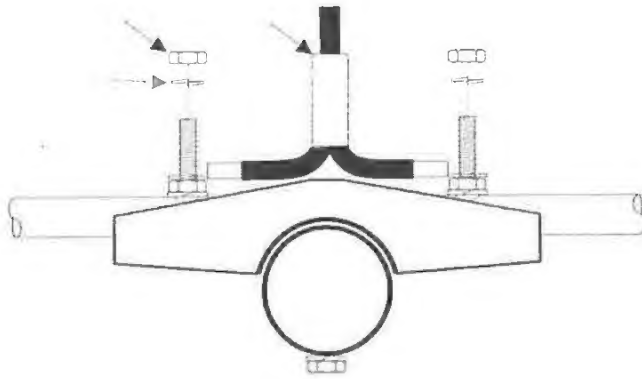
**Figure 1**



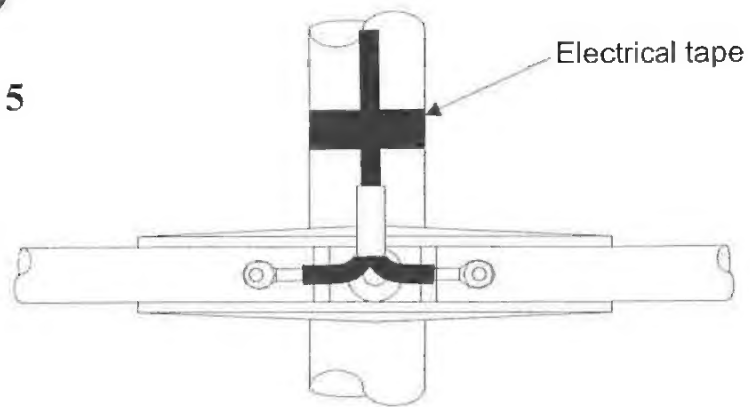
Install the other elements onto the boom using the parts shown in figure 3. The elements should go in order from longest to shortest from back to front.



Attach the feed line as shown in figure 5 and 6. Use tape or other means to secure the coax to the boom of the antenna. Install the U-bolt on the boom of the antenna either in the horizontal or vertical position.



**Figure 5**



**Figure 6**

Install the end caps onto the antenna and double check all hardware for tightness.

## **INSTALLATION**

Install the antenna in a safe location where it is located well away from power lines. Also make sure that if the antenna pole were to fall, it could not contact power lines. For horizontal mounting, clamp the u-bolt around your mast and secure the feed line so that it has enough slack for rotation if you are using a rotator. This antenna is small enough for a light weight or TV antenna rotator if desired. Although it is not required, when vertical mounting is desired a short piece of non-conductive mast at least as long as the longest element of the antenna will reduce pattern distortion caused by the mast being in the same plane as the elements.

## MFJ-1852 PARTS LIST

Item	P/N	DESCRIPTION	QTY
1	20-1852-1	Tube, Boom 1-1/4 x .035 x 57" -----	1
2	20-1852-3	Element, Rod Al 3/16 x 40 - 11/16" -----	1
3	20-1852-4	Element, Rod Al 3/16 x 37 - 3/8" -----	1
4	20-1852-5	Element, Rod Al 3/16 x 36 - 3/8" -----	2
5	20-1852-6	Element, Rod Al 3/16 x 34 - 15/16" -----	1
6	20-1852-2	Tube, 7/16 x .028 x 19-1/4" -----	2
7	13-0246-6	Balun, Coax feed -----	1

### 17-1852-1 PARTS PACK

8	014764	Bolt, 8-32 x 2-1/4" -----	6
9	010229	Bolt, 8-32 x 1" -----	2
10	011941	Washer, split #8 -----	10
11	010011	Nut, 8-32 Hex -----	10
12	190028	Half washer -----	5
13	190026	Saddle element -----	5
14	455644	Caplug, 7/16 -----	2
15	455630	Caplug, 1-1/4 -----	2
16	465420	Insulator, Driven element -----	1
17	758-9199	U-bolt 1-3/4 -----	1

# NOTES

## FULL 12 MONTH WARRANTY

MFJ Enterprises, Inc. warrants to the original owner of this product, if manufactured by MFJ Enterprises, Inc. and purchased from an authorized dealer or directly from MFJ Enterprises, Inc. to be free from defects in material and workmanship for a period of 12 months from date of purchase provided the following terms of this warranty are satisfied.

1. The purchaser must retain the dated proof-of-purchase (bill of sale, canceled check, credit card or money order receipt, etc.) describing the product to establish the validity of the warranty claim and submit the original of machine reproduction or such proof of purchase to MFJ Enterprises, Inc. at the time of warranty service. MFJ Enterprises, Inc. shall have the discretion to deny warranty without dated proof-of-purchase. Any evidence of alteration, erasure, or forgery shall be cause to void any and all warranty terms immediately.
2. MFJ Enterprises, Inc. agrees to repair or replace at MFJ's option without charge to the original owner any defective product under warranty provided the product is returned postage prepaid to MFJ Enterprises, Inc. with a personal check, cashier's check, or money order for \$7.00 covering postage and handling.
3. MFJ Enterprises, Inc. will supply replacement parts free of charge for any MFJ product under warranty upon request. A dated proof of purchase and a \$5.00 personal check, cashier's check, or money order must be provided to cover postage and handling.
4. This warranty is **NOT** void for owners who attempt to repair defective units. Technical consultation is available by calling (601) 323-5869.
5. This warranty does not apply to kits sold by or manufactured by MFJ Enterprises, Inc.
6. Wired and tested PC board products are covered by this warranty provided **only the wired and tested PC board product is returned**. Wired and tested PC boards installed in the owner's cabinet or connected to switches, jacks, or cables, etc. sent to MFJ Enterprises, Inc. will be returned at the owner's expense unrepaired.
7. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person or property by the use of any MFJ products.
8. **Out-of-Warranty Service:** MFJ Enterprises, Inc. will repair any out-of-warranty product provided the unit is shipped prepaid. All repaired units will be shipped COD to the owner. Repair charges will be added to the COD fee unless other arrangements are made.
9. This warranty is given in lieu of any other warranty expressed or implied.
10. MFJ Enterprises, Inc. reserves the right to make changes or improvements in design or manufacture without incurring any obligation to install such changes upon any of the products previously manufactured.
11. All MFJ products to be serviced in-warranty or out-of-warranty should be addressed to **MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, Mississippi 39759, USA** and must be accompanied by a letter describing the problem in detail along with a copy of your dated proof-of-purchase.
12. This warranty gives you specific rights, and you may also have other rights which vary from state to state.



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